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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.     |
|--|-------------|----------------------|---------------------|----------------------|
| 09/997,733   | 11/29/2001  | James A. Proctor JR. | 2479.1008-015       | 4012                 |
| 27975  | 7590        | 08/10/2005           | EXAMINER            |                      |
| ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A.<br>1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE<br>P.O. BOX 3791<br>ORLANDO, FL 32802-3791 |             |                      |                     | HALIYUR, VENKATESH N |
| ART UNIT   |             | PAPER NUMBER         |                     |                      |
|  |             |                      |                     | 2664                 |

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/997,733             | PROCTOR, JAMES A.   |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Venkatesh Haliyur      | 2664                |  |

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 11/29/2001.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-29 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-29 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 11/29/2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4123/02, 6/21/04

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

## DETAILED ACTION

1. Claims 1-29 have been examined.

### *Priority*

Acknowledgement is made for claiming benefit of a provisional application filed on 12/01/2000 under 35 U.S.C. 120, 121 or 365(c).

### *Drawings*

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Item numbers 112, 112-1,112-2 and 150 are not shown in Fig 1. Item number 350 is not shown in Fig 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities: In line 19 of page 11 of the specification (under section "Detailed Description of a Preferred Embodiment") mention reference to Fig 3. In line 5 of page 15 "Active state 405" is mentioned instead of "Active state 450". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Regarding claim 6, the phrase "sent to the user" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). There is insufficient antecedent basis for claim 6. See MPEP § 2173.05(e).

6. Regarding claim 13, the phrases "alternative reports", "link command reports" "relative adjustment reports" and "absolute level reports" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

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7. Regarding claim 22, the phrase "predetermined number" (instead of "predetermined number of time slots") renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). There is insufficient antecedent basis for claim 22. See MPEP § 2173.05(e).

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-7, 9-12, 15, 18-28, are rejected under 35 U.S.C 102(b) as being anticipated by Moon et al [US Pat 6831910].

Regarding claim 1, 18, Moon et al disclosed a "Power Control Device and Method for Controlling a Reverse Link Common Channel in a CDMA Communication System" [Fig. 11] to maintain synchronization and power control of wireless signals sent between a mobile station and a base station. Moon et al disclosed transmitting wireless messages having a power level from a mobile station, receiving the wireless message at the base station, determining the power level in the base station and transmitting a power control message to the mobile station indicating the change to a new power level

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and mobile station receiving a power control message, computing a power level corresponding to the new power level, adjusting the transmission power according to the new power level and transmitting a successive wireless message from the mobile station to the base station at the new power level and maintaining synchronization between the transmitter and the receiver between the sending of the wireless message and the sending of the successive wireless message by the new power level indicated in the power control message [column 2, lines 1-67, column 3, lines 1-31, column 12, lines 4-8].

Regarding claim 2-4,19-21, Moon et al disclosed a mechanism for sending messages at a predetermined interval and in time slots for a single subscriber or for a power control group [column 6, lines 6-10,column 7, lines 49-57].

Regarding claim 5,6,23,24 Moon et al disclosed that each message belongs to a time slot that corresponds to a particular channel of the subscriber [column 6, lines 53-56, column 8, lines 1-9].

Regarding claim 7, Moon et al disclosed a power control level (metric) determination process for the power control message [column 11, lines 19-56].

Regarding claim 9, 25, Moon et al disclosed a device and method for power control bit indication in the power control message [column 2, lines 66-67, column 3, lines 1-5]

Regarding claim 10, 26, Moon et al disclosed an identification method for determining which one of the mobile stations sent the message [column 8, lines 20-32].

Regarding claim 11, 27, Moon et al disclosed a method for determining which one of the mobile stations the message was sent from based on slot hopping pattern table [column 8, lines 54-64].

Regarding claim 12, 28, Moon et al disclosed that wireless messages are sent on a reverse link and power control command messages are sent on a forward link [column 3, lines 6-15].

Regarding claim 15, Moon et al disclosed a method for PN code sequences for code phase lock [column 8, lines 33-62].

Regarding claim 22, Moon et al disclosed a method for power control group consisting of an arbitrary number of subscribers as 8 for a power control group channel However, this can be a value of 16 [column 8, lines 23-32].

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8,13,14,16,17,29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon et al [US Pat 6831910] in view of Sawahashi et al [US Pat 5590409].

Regarding claim 8, Moon et al fails to disclose a power control metric determination method comprising at least one of a signal to noise ratio (SNR), a link quality measurement, a carrier to interference (C/I) ratio and a bit-error rate (BER). However, Sawahashi et al in their "Transmission Power Control Method and Transmission Power Control, Apparatus", disclosed a SNR method [column 2, lines 29-53] and a SIR (signal to interference) method [column 4, lines 31-67] for power control metric determination process.

Therefore it would have been obvious for one of ordinary skill in the art to use the teachings of Sawahashi et al to include signal to noise ratio or signal to interference in to the system of Moon et al for the determination of power control metric for the

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purposes of controlling signal strength over a reverse link of a CDMA wireless communication system.

Regarding claim 13, Moon et al fails to disclose wireless message comprising alternative reports, the alternative reports including link command reports, relative adjustment reports, and absolute level reports. However, Sawahashi et al discloses that a frame sent (wireless message) from a mobile station consists information data related to power control levels [column 8, lines 1-58].

Therefore it would have been obvious for one of ordinary skill in the art to use the teachings of Sawahashi et al to include information data in wireless messages in to the system of Moon et al to send alternative reports in the wireless messages for the purposes of controlling signal strength over a reverse link of a CDMA wireless communication system.

Regarding claim 14, 29, Moon et al fails to disclose a mechanism for sending power control message two time slots after the corresponding wireless message. However, Sawahashi et al disclosed a mechanism for estimating at base station a transmission power at two transmission power control periods [Fig 6, column 7, lines 1-21].

Therefore it would have been obvious for one of ordinary skill in the art to use the teachings of Sawahashi et al to include two time slots waiting time in to the system of

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Moon et al after sending a wireless message for controlling signal strength over a reverse link of a CDMA wireless communication system.

Regarding claim 16, 17, Moon et al fails to disclose a method for determining minimum duration required to maintain power control with in a minimum power control error. However, Sawahashi et al discloses a mechanism where in the mobile station calculates the transmission power in accordance with the power difference between present and previous transmission power control periods. [column 5, 58-67, column 6, 1-67].

Therefore it would have been obvious for one of ordinary skill in the art to use the teachings of Sawahashi et al to calculate power difference of the two power control time periods in to the system of Moon et al for the determining minimum duration required to maintain power control with in an acceptable power control error for the purposes of controlling signal strength over a reverse link of a CDMA wireless communication system.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art in reference here are Moon et al and Sawahashi et al.

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11. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616.

The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached @ (571)-272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

  
Ajit Patel  
Primary Examiner